What is claimed is:

1. A substantially isolated and purified mammalian cortistatin.

2. A cortistatin of claim 1 wherein said cortistatin comprises a cortistatin having a sequence selected from the group consisting of SEQ ID NOs 2, 5, 6, 7, 8, 9, 10, 11, 12, 23, 24, 26, positions 44 to 74 of SEQ ID NO 26, positions 77 to 105 of SEQ ID NO 26, and positions 89 to 105 of SEQ ID NO 26.

3. A substantially purified nucleic acid encoding a cortistatin of claim 2.

4. A nucleic acid of claim 3 wherein said nucleic acid comprises a nucleic acid having a sequence selected from the group consisting of SEQ ID NOs 1, 4 and 25.

5. A vector comprising a nucleic acid of claim 3, wherein said vector is adapted for expression of said encoded cortistatin.

6. An isolated cell comprising a vector of claim 5.

7. An oligonucleotide primer for hybridizing a nucleic acid which encodes a cortistatin, wherein said primer comprises a primer having a nucleotide sequence selected from the group consisting of SEQ ID NOs 13, 14, 15, 16, 20, 21 and 22.

8. An antibody that immunoreacts with a substantially isolated mammalian cortistatin of claim 1.

9. An antibody that immunoreacts with a cortistatin of claim 2.

10. A kit for detecting the presence of cortistatin in a sample comprising a first container of anti-cortistatin antibody of claim 8 in an amount

sufficient for at least one assay, and further comprising a second container of a label that binds to the anti-cortistatin antibody.

11. A kit for detecting the presence of genes that encode cortistatin in a sample comprising a first container of a nucleic acid of claim 3 in an amount sufficient for at least one assay,and further comprising a second container of a labeled oligonucleotide that binds to the nucleic acid.

12. A method of detecting the presence of a nucleic acid that encodes cortistatin in a sample comprising the steps of:

(a) hybridizing the nucleic acid in the sample with an oligonucleotide that includes at least 10 contiguous nucleotides from a nucleotide sequence of claim 3 to form a hybridization product; and

(b) detecting the presence of the hybridization product.

13. A method of detecting the presence of a cortistatin antigen in a sample comprising the steps of:

(a) contacting a sample with an anti-cortistatin antibody of claim 8 that immunoreacts with human cortistatin or a segment thereof for a time period sufficient for said antibody to immunoreact with said antigen present in the sample and form an immunoreaction complex; and

(b) detecting the presence of an immunoreaction complex, thereby detecting said antigen.

14. A method of detecting the presence of a mutation in a cortistatin gene of a mammal that comprises an expansion of the CTG domain of the cortistatin gene, comprising the steps of:

(a) determining the nucleotide sequence of the CTG domain of the cortistatin gene in a nucleic acid sample from said mammal; and

(b) comparing the determined nucleotide sequence to the known sequence of the CTG domain in a normal cortistatin gene to identify the presence of a sequence expansion in the CTG domain, and thereby said mutation.

15. An oligonucleotide encoding a polypeptide selected from the group consisting of SEQ ID Nos 17, 18, and 19.

16. An oligonucleotide of claim 15 selected from the group consisting of SEQ ID Nos 20, 21, and 22.

17. A method for inducing sleep in a mammal comprising administering an effective amount of a cortistatin of claim 1 to said mammal.

18. A method for inducing sleep in a mammal comprising administering an effective amount of a cortistatin to said mammal wherein said cortistatin is a cortistatin of claim 2.

19. A method of claim 18 wherein said amount is from about 1 µg/kg/day to about 15 mg/kg/day.

20. A pharmaceutical composition for inducing sleep in a mammal comprising from about 50 µg to about 750 mg of a cortistatin of claim 1 and a pharmaceutically acceptable carrier.

add B1